

D5550

SPECIFICATION AMENDMENTS

[0010] Fig. 1, Detail A ~~[[a]]~~ is ~~[[a]]~~ an enlarged sectional view of the structure within circle 1a of Fig. 1;

[0013] The piston of the present invention is shown generally at 10 in Fig. 1 and in more detail in Fig. 1, Detail A ~~[[a]]~~. Generally, the piston 10 has a centrally located symmetrical upward directed cavity for forming a portion of a combustion chamber 12 within a cylinder (not shown) of a diesel engine. The combustion chamber 12 is defined in the crown 14 of the piston 10. The engine has a fuel injector 22 for forming a fuel injection plume relative to the combustion chamber 12. The piston 10 may be utilized with two-valve or multiple-valve heads. It is desirable that the fuel be injected proximate the center of the piston 10 and that the injection pattern be radially symmetrical relative to the longitudinal chamber axis 16. The piston 10 is effective at reducing diesel engine pollutant emission, such as NO_x and soot, as depicted in the graphic representations of Figs. 2 and 3. The piston 10 is preferably applicable to heavy-duty and medium duty diesel engines.